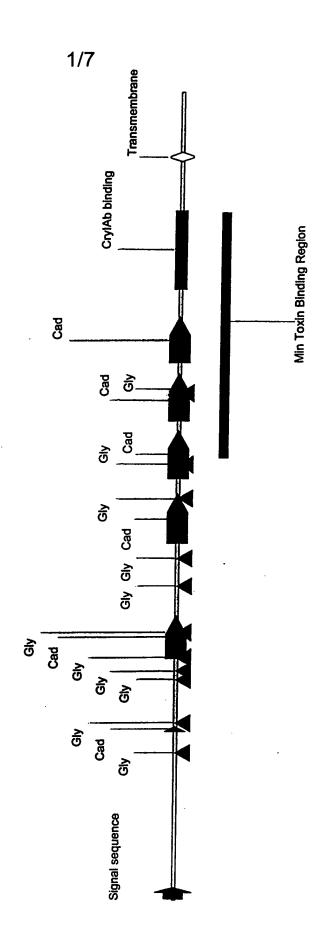
Title: NOVEL BT TOXIN RECEPTORS AND METHODS OF USE Inventor(s): John P. Mathis Application No: Not Assigned Atty Dkt No: 035718/274644(5718-201)



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Title: NOVEL BT TOXIN RECEPTORS

AND METHODS OF USE Inventor(s): John P. Mathis Application No: Not Assigned Atty Dkt No: 035718/274644(5718-201)

		2/7
		1 50
AiBtR	(1	
SfBtR	(1	
HzBtR	(1	
OnBtR	(1	
BmBtR	(1	
MsBTR	(1	
		Signal Peptide
		- · ·
		51 100
AiBtR	(51) IYDGLSWNERPLVPANEDRLDVCMDEFFRGMQYIFMEEEIHGD
SfBtR	(43) NFDGLTWAQQPLLPAED-REEVCLNDYEPDPWSNNHGDQRIYMEEEIEGP
HzBtR	(43	
OnBtR	(43	
BmBtR	(43)	
MsBTR	(44)	
		101 150
AiBtR	(94)	VPIAKLNYIGDKIPYVHSTFTVGSFRLLGPEIRKISGDWHLVITNRO
SfBtR	(92)	VVIAKINYQGNTPPQIRLPFRVGAAHMLGAEIREYPDATGDWYLVITORO
HzBtR	(89)	
OnBtR	(87)	
BmBtR	(90)	
MsBTR	(91)	
		151 200
AiBtR	(141)	The state of the s
SfBtR	(142)	
HzBtR	(139)	The state of the s
OnBtR	(135)	Talanta Establishment Talanta Applications
BmBtR	(140)	DYETPGMQQYVFNIRIDGETLVAGVSLLIVNIDDNAPIIQALEPCQVDEL
MsBTR	(139)	HYELPGMQQYMFNVRVDGQSLVAGVSLAIVNIDDNAPIIQNFEPCRVPEL
		201 250
AiBtR	(189)	RDARSVKTCRYIVHDVDGEISTRFMRYEIESGRG-DEEVFSLVREQAPNN
SfBtR	(192)	VEPH-VTECKYIVSDADGLISTSVMSYHIDSERG-DEKVFELIRKDYPG-
HzBtR	(189)	GETG-ITSCKYTVSDADGEISTRFMRFEISSDRD-DDEYFELVRENIQG-
OnBtR	(185)	GEAR-LTDCVYQVSDRDGEISTRFMTFRVDSSRAADESIFYMVGEYDPS-
BmBtR	(190)	GEAR-LTECVYVVTDADGRISTQFMQFRIDSDRG-DDKIFYIQGANIPG-
MsBTR	(189)	GEPG-LTECTYQVSDADGRISTEFMTFRIDSVRG-DEETFYIERTNIPN-
		251
AiBtR	(238)	251 300
SfBtR	(238)	EWMWCYMVVEVKGSLDFAQNPLHIFRAHAFDSKDNTHSVLMTVEVKNVEQ
HzBtR	(236)	DWTKVYMVLELKKSLDYEENPLHIFRVTASDSLPNNRTVVMMVEVENVEH
OnBtR	(233)	QWMYVHMRVHVKKPLDYEENPLHLFRVTAYDSLPNTHTVTMMVQVENVEN
BmBtR	(233) (237)	DWFNMKMTVGINSPLNFETTQLHIFSVTASDSLPNNHTVTMMVQVENVES
MsBTR	(237)	EWIRMTMTVGINEPLNFETNPLHIFSVTALDSLPNTHTVTLMVQVENVEH
MEDIK	(230)	QWMWLNMTIGVNTSLNFVTSPLHIFSVTALDSLPNTHTVTMMVQVANVNS

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		5/1
		301 350
AiBtR	(288)	RPPQWIEIFAVQQFDEKIKKSFRVRAIDADTGINKTISYRLRTAVGEENL
SfBtR	(289)	RNPRWMEIFAVQQFDEKQAKSFTVRAIDGDTGINKPIFYRIETEDEDKEF
HzBtR	(286)	RPPRWMEIFAVQQFDEKTEQSFRVRAIDGDTGIDKPIFYRIETEKGEEDL
OnBtR	(283)	RPPRWVEIFSVQQFDEKTNQSFSLRAIDGDTGINRAINYTLIR-DDADDF
BmBtR	(287)	RPPRWVEIFAVQQFDEKTAQSFPVRAIDGDTGINKPIHYRLET-AEEDTF
MsBTR	(286)	RPPRWLEIFAVQQFEEKSYQNFTVRAIDGDTEINMPINYRLIT-NEEDTF
	(,	
		351 400
AiBtR	(338)	FELETKEGSQ-GVWLHVGPIDRDELEKEVFLLSIIAYKYGDDGTLY
SfBtR	(339)	FSIENIGEGRDGARFHVAPIDRDYLKRDMFHIRIIAYKQGDNDKEGESSF
HzBtR	(336)	FSIOTIEGGREGAWFNVAPIDRDTLEKEVFHVSIIAYKYGDNDVEGSSSF
OnBtR	(332)	FSLEVIEDGAILHVTEIDRDKLERELFNLTIVAYKSTDASF
BmBtR	(336)	FHIRTIEGGRSGAILYVDPIDRDTLQREVFQLSIIAYKYDNESS
MsBTR	(335)	FSIEALPGGKSGAVFLVSPIDRDTLQREVFPLTIVAYKYDEEAF
MSDIK	(333)	PB1EADFGGRBGAVI: DVDF1DID1DQRDVII D11VAIRIDD D11
		401 450
AiBtR	(383)	ETPANITIIINDVNDQLPSPLKEGGVYTIDIMEETPMTLN-LENFGFHDR
SfBtR	(389)	ETSANVTIIINDINDQRPEPFHKEYTISIMEETAMTLD-LQEFGFHDR
HzBtR	(386)	OSKTDVVIIVNDVNDQAPLPFREEYSIEIMEETAMTLN-LEDFGFHDR
		ATEAHIFIIVNDVNDQAPLPFREEISIEIMEETAMILN-BEDFGFHDR
OnBtR	(373)	
BmBtR	(380)	ATAANVVIIVNDINDQRPEPLFKEYRLNIMEETALTLNFDQEFGFHDR
MsBTR	(379)	STSTNVVIIVTDINDQRPEPIHKEYRLAIMEETPLTLNFDKEFGFHDK
		451 500
AiBtR	(432)	DLGPNAQYNVRLESVYPDGVHEAFYIAPERGYQRQSFFLSTQNHHMLDYD
SfBtR	(436)	DIGPHAQYDVHLESIQPEGAHTAFYIAPEEGYQAQSFTIGTRIHNMLDYE
HzBtR	(433)	DLGPHAQYTVHLESIHPPRAHEAFYIAPEVGYQRQSFIMGTQNHHMLDFE
	(421)	DLGENAQYTVELEDVFPPGAASAFYIAPGSGYQRQTFIMGTINHTMLDYE
OnBtR		DLGQNAQYTVRLESDYPADAAKAFYIAPEVGYQRQTFIMGTANHKMLDYE
BmBtR	(428)	
MsBTR	(427)	DLGQNAQYTVRLESVDPPGAAEAFYIAPEVGYQRQTFIMGTLNHSMLDYE
		501 550
AiBtR	(482)	NETVDFTKIQIKAVAIDSLNNTMKGFATININLINWNDELPIFKNSVQNV
SfBtR	(486)	DDD-YRPGIKLKAVAIDRHDNNHIGEAIININLINWNDELPIFDEDAYNV
0 = = 000		VPEFQNIQLRAVAIDMDDPKWVGIAIINIKLINWNDELPMFESDVQTV
HzBtR	(483)	DVIFQNIIIKVKAVDMNNASHVGEALVYVNLINWNDELPIFEESSYSA
OnBtR		VPEFQRIRLRVIATDMDNEEHVGVAYVYINLINWNDEEPIFEHSVQNV
BmBtR	(478)	
MsBTR	(477)	VPEFQSITIRVVATDNNDTRHVGVALVHIDLINWNDEQPIFEHAVQTV
		551 600
AiBtR	(532)	SFPETVAAGFHVATIKAEDRDVGDRVEHSLMGNAVDFLTIDKYSGEIFVA
SfBtR	(535)	TFEETVGDGFHIGKYRAKDRDIGDIVEHSILGNAANFLRIDIDTGDVYVS
HzBtR	(531)	SFDETEGAGFYVATVVAKDRDVGDKVEHSLMGNAVSYLRIDKETGEIFVT
OnBtR	(519)	SFKETVGAGFPVATVLALDRDIDDVVVHSLMGNAVDYLFIDESTGEIFVS
BmBtR	(526)	SFKETEGKGFFVANVRAHDRDIDDRVEHTLMGNANNYLSIDKDTGDIHVT
		TFDETEGEGFFVAKAVAHDRDIGDVVEHTLLGNAVNFLTIDKLTGDIRVS
MsBTR	(525)	I F DE LEGEGE E VAKAVANDKDIGDV VENI EDGNAVNE DI IDKLIGDIKVS

Title: NOVEL BT TOXIN RECEPTORS AND METHODS OF USE

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		177
		650
AiBtR	(582)	VNNSFNYHRQNELFIQIRADDTLGEGPYHTTTSQLVIYLEDVNNTPPVLR
SfBtR	(585)	RDDYFDYQRQNEIIVQILAVDTLG-LPQNRATTQLTIFLEDINNTPPILR
HzBtR	(581)	
OnBtR	(569)	
BmBtR	(576)	-
MsBTR	(575)	
MSBIR	(5/5)	ANDSFNYHRESELFVQVRATDTLG-EPFHTATSQLVIRLNDINNTPPTLR
		651 700
AiBtR	(632)	LPRRGPHVEENVPHGHPITNDDGIQLIASDPDTTAELWFEIDWEESYATK
SfBtR	(634)	LPRSSPSVEENVEVGHPITEGLTATDPDTTADLHFEIDWDNSYATK
HzBtR	(630)	
OnBtR	(619)	
BmBtR	(625)	
MsBTR	(624)	LPRGSPQVEENVPDGHVITQELRATDPDTTADLRFEINWDTSFATK
		701 750
AiBtR	(682)	QGNE-TLKDEYRNCIEILTRYQDENRKGEAYGVLEVROIRDDPVVTIDYE
SfBtR	(680)	QGTNGPNTADYHGCVEILTVYPDPDNHGRAEGHLVAREVSDGVTIDYE
HzBtR	(676)	QGRN-TDSKEYIGCIEIETIYPNINQRGNAIGRVVVREIRDGVTIDYE
OnBtR	(665)	QGRE-TNPTEYVGCIVIETIYPTEGNRGSAIGRLVVQEIRDNVTIDFE
BmBtR	(671)	
		QGRE-ANPIEFHNCVEIETIYPAINNRGSAIGRLVVKKIRENVTIDYE
MsBTR	(670)	QGRQ-ANPDEFRNCVEIETIFPEINNRGLAIGRVVAREIRHNVTIDYE
		751 800
AiBtR	(731)	EFEVLYLVVRVRDRNTTLGDDYDEGTLTITIIDMNDNWPTWEEGQLTQQF
SfBtR	(728)	KFEVLYLVVRVIDRNTVIGPDYDEAMLTVTIIDMNDNWPIWADNTLQQTL
HzBtR	(723)	MFEVLYLTVIVRDLNTVIGEDHDISTFTITIIDMNDNPPLWVEGTLTOEF
OnBtR	(712)	EFEMLYLTVRVRDLNTVIGDDYDEATFTITIIDMNDNAPIFANGTLTOTM
BmBtR	(718)	EFEMLYLTVRVRDLNTVIGDDYDESTFTITIIDMNDNPPIWVPGTLEOSL
MsBTR	(717)	EFEVLSLTVRVRDLNTVYGDDYDESMLTITIIDMNDNAPVWVEGTLEQNF
MSDIK	(/1//	EFEVUSLIVKVRDENIVIGDDIDESMETITITIDMNDNAPVWVEGTEEQNF
		801 850
AiBtR	(781)	RVREMSLSGVVIGSLRATDRDGPLYNQVRYTIQPVDGTPADLVAIDFRTG
SfBtR	(778)	RVREMADEGVIVGTLLATDLDGPLYNRVRYTMVPIKDTPDDLIAINYVTG
HzBtR	(773)	RVREVAASGVVIGSVLATDIDGPLYNQVRYTITPRLDTPEDLVDIDFNTG
OnBtR	(762)	RVRELAASGTLIGSVLATDIDGPLYNQVRYTIQPRNNTPEGLVKIDFTTG
BmBtR ·	(768)	RVREMSDAGVVIGTLTATDIDGPLYNQVRYTMKANEGTPENLLMIDFYTG
MsBTR	(767)	
MEDIK	(767)	RVREMSAGGLVVGSVRADDIDGPLYNQVRYTIFPREDTDKDLIMIDFLTG
		851 . 900
AiBtR	(831)	QMTVQKNQAIDADVPPRFNLYYTVTASDKCSMEDQS-NCPDDKTYWNTTA
SfBtR	(828)	QLTVNKGQAIDADDPPRFYLYYKVTASDKCSLDEFFPVCPPDPTYWNTEG
HzBtR	(823)	QISVKLHQAIDADEPPRQNLYYTVIASDKCDLLTVT-ECPPDPTYFETPG
OnBtR	(812)	QIEVDANEAIDADEPWRFYLYYTVIASDECSLENRT-ECPPDSNYFEVPG
BmBtR	(818)	QITVKTSGAIDADVPRRYNLYYTVVATDRCYAEDPD-DCPDDPTYWETPG
MsBTR	(817)	QISVNTSGAIDADVPRRINDITIVVAIDRCTAEDPD-DCPPDPTTWETEG
HIDDIK	(01/)	WID ANT BOAT DAD I F FAT HUI I I V VASDROS I EDPA - DCPPDPTY WETEG

Title: NOVEL BT TOXIN RECEPTORS AND METHODS OF USE

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Application No: Not Assigned Atty Dkt No: 035718/274644(5718-201)

		<i>577</i>
		901 950
AiBtR	(880)	KIAIQVIDTNNKVPFVEPEKFKNEVTIVEDPVTGDVTFLTSESIYEDAVS
SfBtR	(878)	
HzBtR	(872)	
OnBtR	(861)	
BmBtR	(867)	
MsBTR	(866)	
	(000)	TIMEDIA VILLENALLE
		951 1000
AiBtR	(930)	1000
SfBtR	(911)	
HzBtR	(905)	The second secon
OnBtR	(894)	
BmBtR	(900)	Z
MsBTR	(899)	GDEVVKVIGSDLDRDDIYHTIRYQINYAVNPRLRDFFAVDPDTGRVYVYY
MSBIR	(899)	LDEVVTLIASDLDRDEIYHTVSYVINYAVNPRLMNFFSVNRETGLVYVDY
		1001
AiBtR	(000)	1001 1050
	(980)	PGPDKLDRDGDEPTHRIHFSIFDNFMSEGEPNRNQISGEALIILLDV
SfBtR	(961)	TTSEVLDRDGEEPEHRIIFTIVDNLEGAGDGNQNTISTEVRVILLDI
HzBtR	(955)	TAGELLDRDGDEPTHRIFFNVIDNFYGEGDGNRNQNETQVLVVLLDI
OnBtR	(944)	PGDEKLDRDGDEPTHTIFVNFIDNFFSDGDGRRNQDEVEIFVVLLDV
BmBtR	(950)	TTDEVLDRDGDEPQHRIFFNLIDNFFQQGDGNRNQNDAEVLVVLL DV
MsBTR	(949)	ETQGSGEVLDRDGDEPTHRIFFNLIDNFMGEGEGNRNQNDTEVLVILLDV
	(4.00-)	1051 1100
AiBtR	(1027)	NDNKPELPSPDSFPPWTVSESVVEGVRIPPEILAPDRDEPGTDNSRVAYD
SfBtR	(1008)	NDNKPELP-IPDGEFWTVSEGEVEGKRIPPEIHAHDRDEPFNDNSRVGYE
HzBtR	(1002)	NDNYPELPETIPWAISESLELGERVQPEIFARDRDEPGTDNSRVAYA
OnBtR	(991)	NDNAPEMPL-PDELRFDVSEGAVAGVRVLPEIYAPDRDEPDTDNSRVGYG
BmBtR	(997)	NDNAPELPE-PDELSWSVSESLTKGTRLQPHIYAPDRDEPDTDNSRVGYA
MsBTR	(999)	NDNAPELPP-PSELSWTISENLKQGVRLEPHIFAPDRDEPDTDNSRVGYE
		1101 1150
AiBtR	(1077)	LLGVTPER-DIEVPQLFKIETIEKDLG-INQTGILETVTPLQGYWGTYEI
SfBtR	(1057)	IRSIKLINRDIELPQDPFKIITIDDLDTWKFVGELETTMDLRGYWGTYDV
HzBtR	(1049)	ITGLASTDRDIQVPNLFNMITIERDRG-IDQTGILEAAMDLRGYWGTYQI
OnBtR	(1040)	ILDLTITDRDIEVPDLFTMISIENKTGELETAMDLRGYWGTYEI
BmBtR	(1046)	IISLTIANREIEVPELFTMIQIQNVTGELETAMDLRGYWGTYAI
MsBTR	(1048)	ILNLSTER-DIEVPELFVMIQIANVTGELETAMDLKGYWGTYAI
		1151 1200
AiBtR	(1125)	HIKAFDHGDPRQESDEKYQLVVRPYNFHEPTFVFPLDGSAIRLSRDRAIV
SfBtR		EIRAFDHGFPMLDSFETYQLTVRPYNFHSPVFVFPTPGSTIRLSRERAIV
HzBtR		DIQAYDHGIPQRISNQKYPLVIRPYNFHDPVFVFPQPGSTIRLAKERAVV
OnBtR	(1084)	FIEAFDHGYPQQRSNETYTLVIRPYNFHHPVFVFPQPDSVIRLSRERATE
BmBtR	(1090)	HIKAYDHGIPQQMSNETYELVIRPYNFHAPVFVFPKHGATLRLARERAVV
MsBTR		HIRAFDHGIPQMSMNETYELIIHPFNYYAPEFVFPTNDAVIRLARERAVI

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		0//	
		1201 125	-
AiBtR	(1175)	SGELTVVGAAQ-APLQRISATDEDGLHAGTVSFSVVGDDEAMNYFDVWN	D
SfBtR	(1157)	NGMLALANIASGEFLDRLSATDEDGLHAGRVTFSIAGNDEAAEYFNVLN	D
HzBtR	(1148)	NGILATVDGEFLDRIVATDEDGLEAGLVTFSIAGDDEDAQFFDVLNI	D
OnBtR	(1134)	GGVLATAANEFLEPIYATDEDGLHAGSVTFHVQGNEEAVQYFDITE	
BmBtR	(1140)	NGLLATVDGEFLNRIVATDEDGLHAGQVAFEVVGDTEAVDYFHIVN	
MsBTR	(1141)	NGVLATVNGEFLERISATDPDGLHAGVVTFQVVGDEESQRYFQVVN	
MODIK	(1141)	NGVLAIVNGEPLEKISAIDFDGLIMGVVIFQVVGDEESQKIFQVVNI	
		1251 1300	0
AiBtR	(1224)	GENSGMLALKQALPDGFQEFKLTIRATDAGDEPGPKSTDSTVTVVFI	P
SfBtR	(1207)	GDNSAMLTLKQALPAGVQQFELVIRATDGGTEPGPRSTDCSVTVVFVN	
HzBtR	(1195)	GVNSGALTLTRLFPEEFREFQVTIRATDGGTEPGPRSTDCLVTVVFVI	
OnBtR	(1181)	GAGENSGQLILRQLFPEQIRQFRITIRATDGGTEPGPLWTDVTFSVVFV	
BmBtR	(1187)	GENSGTLMLKQLFPEDIREFEVTIRATDGGTEPRPLSTDCTFSVVFV	
MsBTR	(1188)		
MSDIK	(1100)	${\it GENLGSLRLLQAVPEEIREFRITIRATDQGTDPGPLSTDMTFRVVFV}$	
		1301 1350)
AiBtR	(1272)	Q-VEPQFPTNTQEVAFIEFEAGRSERHELTAAVDQKNILCDIDCYTVYYT	יי
SfBtR	(1255)	TOGDPVFDDNAASVRFVEKEAGMSEKFOLPOADDPKNYRCMDDCHTIYYS	
HzBtR	(1243)	TQGEPVFEDRTYTVAFVEKDEGMLEEAELPRASDPRNIMCEDDCHDTYYS	-
OnBtR	(1231)	TQGDPVFSENAATVAFFEGEEGLRESFELPQAEDLKNHLCEDDCODIYYF	
BmBtR	(1235)	IQGEPIFPTSTHTVAFIEKEAGLLERHELPRAEDRKNHLCSDDCHNIYYF	
MsBTR	(1236)	TQGEPTFF1STHTVAF1EKEAGHBEKHEBPKAEBKKNHLCSBBCHN111F TQGEPRFASSEHAVAF1EKSAGMEESHQLPLAQDIKNHLCEDDCHS1YYR	
MEDIK	(1230)	1QGEPKFASSENAVAF1EKSAGMEESHQUPUAQD1KNHUCEDDCHS1YYK	٤
		1351 1400	j
AiBtR	(1321)	IIGGNAAGHFALDG - NYLYMYSELDRAOAERHELOVAASNY-PGVITA	
SfBtR	(1305)	IVDGNDGDHFAVERENNYLYGGGCLORSCOEOYRVYVAASNIL EGGLSTE	
HzBtR	(1293)	IVGGNSGEHFTVDPRUNVUSDVKPLDRSKOSTHUULTICASDR DNIAAVI	,
OnBtR	(1281)	FIDGNNEGLEVILEOSSNVIBLAGELDREVAUSVULGIJAASNS PDATCI EI	
BmBtR	(1285)	IIDGNNDGHFGLDETTNYUELVKRUDRSVERTYTUTTAASNE PTOG: AI	•
MsBTR	(1286)	IIDGNSEGHFGLDEWANRLELKKKLLREGSASHTLOVAASNS-DUGG LEG	
MSDIK	(1200)	CCV1A stretter domain	!
		1401 1450	
AiBtR	(1368)	PASTLIVI VIVERAMPREMERRAL YTTOMSAPOTOSER PLLTVSATUSE	
SfBtR	(1354)	SSSILIVITOVERNER PUFESEFYTAGVLEFOSTE KELVYLAAKIEE.	
HzBtR	(1342)	QASTUTVIVAVRRAMORDV FORALLYDAG BAGOP DE BAGLTUVAT HE EI	i
OnBtR	(1331)	QUSTOVVTVVVREAMERDIFRQUOVIACISTODSIQ-RELITYRASHITEI	
BmBtR	(1334)	IB-UITTVVVREADPOPEFVRDLYTAGLETBOSIN RELLCIOATHEN	
MsBTR	(1335)	PASILIVIVIVARADERPAFARELY PAGISTADSIG-RELARIANTOSEC	
HODIK	(1333)	CrysA Baiding domain	
		280 W 200 2 200 20 0 334 - 5250 20 20 2	
		1451 1500	
AiBtR	(1418)	HDCHVALDQDBNIVLDBPLIRQVRBSAFSMDPBPGBLARM LQDMAMMHGMPD	
SfBtR	(1403)	LPLY/SIDOETMRIDSSLOTVYEDAPDINSATOVI SUMPOPISYMICSPI	
HzBtR	(1391)	LEGITIV TO TO SEMEADER TO A SECOND STATE OF THE TOTAL SEMENTS OF THE SEMENTS OF T	
OnBtR		DELEVELDRÁSMOLDSSLEAVRDSAPALHATEGVÍSLIMÓPPASMICMPS	
BmBtR		ADTAY TO TO BE THE TAKE THE SAME CONTRACTOR OF TAKEN CONTRACTOR OF TAKEN CONTRACTOR OF TAKEN OF TAKEN CONTRACTOR OF TAKEN OF TAKEN OF TAKEN CONTRACTOR OF TAKEN OF TA	
MsBTR	(1384)	SACTE A LEDY DE LIVERDE AND LANGUE AND LONG TO THE AND LONG TO THE AND LONG TO THE AND LANGUE AND L	
	· ,	Cayla Binding domain	
		All the state of t	

FIG. 2E

Title: NOVEL BT TOXIN RECEPTORS AND METHODS OF USE

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		• • • • • • • • • • • • • • • • • • • •
	(1501 1550
AiBtR	•	
SfBtR		
HzBtR	•	
OnBtR	(1430)	
BmBtR	(1432)	
MsBTR	(1434)	
		Crylla Bhalathag alomatha
3 - D+D	(1510)	1551 1600
AiBtR	(1518)	~
SfBtR	(1503)	The same of the sa
HzBtR	(1491)	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z
OnBtR	(1480)	Z
BmBtR	(1482)	
MsBTR	(1484)	SAGFNMTCNIDQVVPANDPVTGVALEHSTQMRGHFIRDNVPVLADEIEQI
	4	1650
AiBtR	(1567)	IEDTELFRELRTTMLGLGLQLTNVQSGLPPSVAGEDQMLAV <u>YILAGLAG</u> V
SfBtR	(1552)	FTELNTLRDIREVLSTQQLTLLDFAAGGSAVLPGGEYALAVYILAGIAAL
HzBtR	(1541)	RGNPTLVNSIQRALEEQNLQLADLFTGETPILGGDAQARALYALAAVAAA
OnBtR	(1529)	RSDTVLLRTIQLMLSTNSLVLQDLVTGDTPTLGEESMQIAVYALAALSAV
BmBtR	(1531)	RGDMVLLTAIQSTLATRLLVLRDLFTDTSPAP-DAGSAAVLYALAVLSAL
MsBTR	(1534)	RSDLVLLSSIQTTLAARSLVLQDLLTNSSPDS-APDSSLTVYVLASLSAV
		Trans-
		1651 1700
AiBtR	(1617)	<u>LALLCIVLLIT</u> FIIRNRSLNRRIAALSATKYNSVDSNLNRIGLAAPGTNK
SfBtR	(1602)	LAVICLALLIAFFIRNRTLNRRIEALTIKDVP-TDIEPNHASVAVLNINK
HzBtR	(1591)	<u>LALIVVVLLIV</u> FFVRTRTLNRRLQALSMTKYSSQDSGLNRVGLAAPGTNK
OnBtR	(1579)	LGFLCLVLLLALFCRTRALNRQLQALSMTKYGSVDSGLNRAGLAP-GTNK
BmBtR	(1580)	<u>LAALCLLLLVI</u> FIIRTKKLNRRLEALTVKKYGSVDSGLNRVGIAAPGTNK
MsBTR	(1583)	LGFMCLVLLLTFIIRTRALNRRLEALSMTKYGSLDSGLNRAGIAAPGTNK
		membrane
_ •		1701 1750
AiBtR		HAFE-PNPIWNETIKAPDFDAISEQSNDSDLIGIEDLPQFRNDYFPPEQE
SfBtR		HTEPGSNPFYNPDVKTPNFDTISEVSDDLLDVEDLEQFGKDYFPPENE
HzBtR		HAVEGSNPIWNETLKAPDFDALSEQSYDSDLIGIEDLPQFRNDYFPPEEG
OnBtR		HAVEGSNPMWNEAIRAPDFDAISDASGDSDLIGIEDMPQFRDDYFPPGDT
BmBtR	(1630)	HAVEGSNPIWNETIKAPDFDSMSDASNDSDLIGIEDLPHFGENNYFPRDV
MsBTR	(1633)	HTVEGSNPIFNEAIKTPDLDAISEGSNDSDLIGIEDLPHFGNVFMDP
.	/ n =	1751 1795
AiBtR	(1716)	IDMNSNDIGYPEMDARNPLPNHENNFGYSNAPFNPDFTNSQSRR-
SfBtR	(1699)	IESLNFARNPIATHGNNFGVNSSPSNPEFSNSQFRS-
HzBtR	(1691)	SSMRGVVNEHVPESIANHNNNFGFNSTPFSPEFANTQFRR-
OnBtR	(1678)	DSSSGIVLHMGEATDNKPVTTHGNNFGFKSTPYLPQPHPK
BmBtR	(1680)	DEFKTDKPEDIVATHNNNFGFKSTPFSPEFANQFQK
MsBTR	(1680)	EVNEKANGYPEVANHNNNFAFNPTPFSPEFVNGQFRKI